Remarks

Claims 1, 3, 5, 24 and 29 have been amended. Claim 2 has been canceled. Claims 1, 3, 5-20, 24-25, 27-31 are pending.

§ 132 Rejections

Applicant's amendment dated February 13, 2004, has been objected to as introducing new matter into the disclosure. In particular, it is said that the expression "essentially free of a cationic organometallic complex" recited in claims 1, 24 and 29 is not supported by the original disclosure. To overcome the objection, claims 1, 24 and 29 have been amended to eliminate the expression "essentially free of cationic organometalic complex" from each of these claims.

§ 112 Rejections

Claims 10-12 stand rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. In particular, there is said to be no antecedent basis in claim 1 for the photoinitiator in claims 10-12. Claim 1 has been amended to recite a free radically polymerizable composition containing a free radical photoinitiator. Applicant submits that the amendment to claim 1 renders the rejection moot and respectfully requests reconsideration.

§ 103 Rejections

Claims 1, 2, 5, 10, 15, 16 and 29 stand rejected under 35 USC § 103(a) as being unpatentable over Mathews et al. (U.S. 4,313,969). Claims 1-8, 10-20, and 27-31stand rejected under 35 USC § 103(a) as being unpatentable over WO 92/15651 in view of Takahira et al. (U.S. 6,299,975). And claims 1-20, 24, 25 and 27-31 stand rejected under 35 USC § 103(a) as being unpatentable over WO 92/15651 in view of Martens et al. (U.S. 4,181,752).

Independent claims 1, 24 and 29, as amended, are directed to methods of polymerizing a composition consisting essentially of a free radically polymerizable composition. Claims 1 and 29, as amended, are directed more specifically to methods of producing pressure sensitive adhesives. Support for these amendments appears in general throughout the specification and

particularly in original claims 1, 2 and 24 and page 2, line 25 and page 3, line 3, and page 1, line 12-13 of the specification.

The method of claim 1 includes the steps of exposing the composition to a first radiation source having a maximum spectral output occurring at a wavelength of greater than 300 nm and thereafter exposing the composition to a second radiation source having a maximum spectral output occurring at a wavelength of less than 300 nm.

The method of claim 24 includes the steps of exposing the composition to a first radiation source comprising a fluorescent lamp and thereafter exposing the composition to a second radiation source comprising a germicidal lamp.

And the method of claim 29 includes is directed to a method of polymerizing a composition, comprising the sequential steps of providing a composition consisting essentially of a free radically polymerizable composition, exposing the composition to a first radiation source having a maximum spectral output occurring at a wavelength ranging from about 315 nm to 500 nm, and thereafter exposing the composition to a second radiation source having a maximum spectral output occurring at a wavelength ranging from about 200 nm to 300 nm.

None of the cited references taken alone or in combination disclose, teach or suggest such methods.

Matthews et al., disclose a method and apparatus for providing low gloss and gloss controlled radiation-cured coatings. Matthews et al., however, fail to disclose, teach, or suggest a method of producing a pressure sensitive adhesive. Accordingly, independent claims 1 and 29, as amended, are believed to be patentable over Matthews et al.

WO 92/15651 discloses a multi-stage irradiation process for production of acrylic based adhesives. The process includes irradiating the monomeric mixture with electromagnetic radiation having a wavelength of from 280-500 nm, and then irradiating the resulting acrylic copolymer with radiation having a wavelength of from 280-500 nm. (WO 92/15651, page 4, lines 7-16, page 6, lines 4-5, and page 8, line 3) WO 92/15651, however, fails to disclose a method including exposing the composition to a second radiation source having a maximum spectral output occurring at a wavelength of less than 300 nm as defined in independent claims 1 and 29.

Rather, WO 92/15651 discloses that the second polymerization step utilizes light from "high pressure or medium pressure mercury, mercury xenon, or similar type doped lamps" (WO 92/15651, page 8, lines 21-23), all of which are well known in the art to have a maximum spectral output greater than 300 nm. These light sources are desirable because they produce an average light intensity of greater than 20 mW/cm^2 necessary for the process. Accordingly, one would not be inclined to select a different light source, such as a low pressure mercury lamp, or another light source having a maximum spectral output of less than 300 nm.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. To support the conclusion that the claimed invention is obvious, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.

Applicant respectfully disagrees with the Examiner's conclusions that the WO 92/15651, Takahira et al. and Martens et al. references provide the requisite motivation to combine these references in a manner necessary to meet the claims. Rather, the methods of WO 92/15651, Takahira et al. and Martens are complete and functional in themselves so there would be no reason to modify either method. In addition, Applicant submits that the requisite expectation of success is lacking. Rather, the conspicuous omission of low pressure mercury lamps from the disclosure of WO 92/15651 and Martens suggests that such a light source would be undesirable or unsuitable for these methods. Reconsideration is requested.

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested.

Respectfully submitted,

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